

Appln No. 09/882,351

Amdt date July 21, 2004

Reply to Office action of April 21, 2004

REMARKS/ARGUMENTS

Claims 1, 2, 4, 7-14 and 17-23 are pending in this application. In the Office action dated April 21, 2004, the examiner rejects all claims under 35 U.S.C. 103(a) as unpatentable over Rourke et al. in view of Shackle. Applicant disagrees with the examiner's conclusion and requests reconsideration.

As claimed, the present invention is directed to a method for preparing encapsulated particles for use as a positive active material. The particles are encapsulated by application of a coating solution that comprises a conductive agent and two different conductive polymers. A first conductive polymer is selected from the Markush group specified in each of independent claims 1 and 14, and a second conductive polymer is an "ionic conductive polymer different from the first conductive polymer." (See independent claims 1 and 14.) Note that the independent claims have been amended to more clearly recite that two different conductive polymers are required.

In rejecting the claims, the examiner asserts that Rourke discloses that particles of an insertion compound may be encapsulated in an electronically and ionically conducting polymeric material in a solvent in the presence of a conductive filler such as carbon black. However, Rourke fails to teach or suggest the inclusion of two different conductive polymers, one selected from the claimed group, and the other an ionic conductive polymer, the two conductive polymers together with a conductive agent in a solvent. The examiner then relies on Shackle et al. to supply the missing teaching.

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In citing Shackle et al., the examiner first relies on the background section where Shackle et al. disclose that a conductive polymer may be used to replace the carbon in a cathode. (See column 2, lines 1-8.) However, such a teaching is irrelevant as it is directed to the use of conductive polymers as cathodes themselves rather than for coating particles used as a positive active material. The examiner then relies on Shackle et al. at column 2, lines 47-57 which teaches that particles of electro-active material may be coated with a conductive polymer. However, Shackle et al. provide no suggestion to combine two different conductive polymers along with a conductive agent as set forth in the independent claims.

The examiner asserts that from such teachings of Shackle et al., it would have been obvious to replace carbon black as set forth in Rourke with a conducting polymer such as polypyrrole, polyacetylene, or polyaniline. However, as set forth above, while the background of Shackle et al. may teach that a conducting polymer may be used to replace carbon in a cathode itself, and Shackle et al. may further teach that a coated cathode may include a conducting polymer, nowhere do Shackle et al teach any such substitution which results in the use of a coating comprising a conductive agent along with two different conductive polymers as claimed. Moreover, even if Shackle et al. were to teach the replacement of conductive agent with a conductive polymer as the examiner has suggested, the result would be a coating with no conductive agent. Clearly, the invention as claimed is directed to the use a coating with all three: a conductive agent and two different conductive

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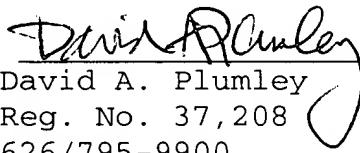
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polymers, a combination neither taught nor suggested by the cited art.

Claims 1, 2, 4, 7-14 and 17-23, as amended, remain in this application. Applicant submits that the claims as written are in condition for allowance and such action is requested. However, if there are any remaining issues, the examiner is asked to contact applicant's counsel at the number below.

Respectfully submitted,  
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